

**REMARKS**

**Summary Of The Office Action & Formalities**

Claims 1-10 have been examined. By this Amendment, Applicant is amending claims 3, 6, and 7, and adding new claims 11-18. No new matter is added. Claims 1-18 are all the claims pending in the Application.

Applicant thanks the Examiner for acknowledging the claim to foreign priority and for confirming that the certified copy of the priority document was received.

Applicant also thanks the Examiner for initialing the references listed on form PTO/SB/08 submitted with the Information Disclosure Statement filed on November 20, 2003.

The prior art rejections are summarized as follows:

1. Claims 1-10 are rejected under 35 U.S.C. § 102(e) as being anticipated by Lee et al. (US Patent Application Publication No. 2004/0013359A1).
2. Claim 3 is rejected under 35 U.S.C. § 102(b) as being anticipated by Chun et al. (USP 5,521,992).
3. Claim 3 is rejected under 35 U.S.C. § 102(b) as being anticipated by Gipson et al. (USP 4,732,446).

Applicant respectfully traverses.

**Claim Rejections - 35 U.S.C. § 102**

*1. Claims 1-10 In View Of Lee et al. (US Patent Application Publication No. 2004/0013359A1).*

In rejecting claims 1-10 in view of Lee et al. (US Patent Application Publication No. 2004/0013359A1), the grounds of rejection state:

Lee et. al. teaches a planar waveguide duplex testing circuit (and method of making same) comprising: where the optical device in the form of plurality of cut or sawed optical fibers forming a plate (Note the fiber waveguides appear to be encased in a matrix material.) 2060,2030 that has a polished angled end facet 2050 with a deposited reflective filter layer on the facet with the optical device being placed in a recess that is adjacent planar waveguide 1140 and used to couple light signals in conjunction with an index matching material, which clearly, fully meets Applicant's claimed limitations.

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Applicant disagrees.

Claim 1 recites a planar lightwave circuit comprising “an optical device, where the optical device comprises ... a piece of fiber, which has at least one thin film layer deposited on an end facet. The Examiner contends that *Lee et al.* disclose a “plurality of cut or sawed optical fibers forming a plate” and notes that the “fiber waveguides appear to be encased in a matrix material.” The Examiner contends that these optical fibers (2060 and 2030) correspond to the claimed optical device.

Applicant submits that the Examiner has misinterpreted or misapplied the reference. The disclosure *Lee et al.* never refers to the waveguides as fibers. The only disclosure of optical fibers in *Lee et al.* relates to the connection of testing equipment to the optical probe (ex. optical fiber 5070, see paragraph 0042 and Fig. 7). The Examiner has not contended that these optical

fibers (5070) correspond to any of the claimed features. In addition, Applicant submits that fiber 5070 does not correspond to the claimed fibers because there is no disclosure that it has the claimed thin film layer.

Further, devices 2060 and 2030, which the Examiner contends are part of an optical fiber plate are disclosed in the specification as a waveguide 2060 that consists of a core layer 2030 (paragraph 0027). Therefore, the Examiner's contention that these form an optical fiber plate is pure speculation and improper since it is not supported by the prior art.

In addition, Applicant submits that a waveguide can be in a plurality of forms (ex. fiber and slab); therefore, a waveguide need not necessarily be a fiber waveguide. Thus, Applicants submit that it is not inherent that the waveguide 2060 is a fiber waveguide as contended by the Examiner.

Because claims 2-5 depend on claim 1, Applicant submits that these claims are patentable at least by virtue of their dependency.

Claim 6 recites "a fiber array comprising at least one bundle of fibers wherein at least one end facet of each fiber comprises a thin film." The Examiner contends that *Lee et al.* disclose a plurality of optical fibers forming a plate. For at least the reasons stated above, Applicant submits that *Lee et al.* do not disclose this feature and that claim 6 is patentable.

Claim 7 recites a method of processing an optical device. The Examiner contends that *Lee et al.* disclose a method of making a planar waveguide duplex testing circuit. Applicant submits, however, that the Examiner has misinterpreted the disclosure of *Lee et al.* *Lee et al.* disclose a method and apparatus for testing chips on a wafer (paragraph 007). *Lee et al.* do not

claim to provide a method for making the planar waveguide duplex testing circuit as contended by the Examiner.

In addition, Applicant submits that since *Lee et al.* do not disclose a plurality of optic fibers forming a plate for the reasons stated above, *Lee et al.* cannot disclose a method described in the claimed combination.

Because claims 8-10 depend on claim 7, Applicant submits that these claims are patentable at least by virtue of their dependency.

*2. Claim 3 In View Of Chun et al. (USP 5,521,992).*

In rejecting claim 3 in view of Chun et al. (USP 5,521,992), the grounds of rejection state:

Chun et. al. '992 teaches (Figs.1-5) a planar light wave circuit 400 that includes an optical device 408 provided in a recess 413, which clearly, fully meets Applicant's claimed limitations.

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Because claim 3 depends on claim 1 and Chun does not disclose at least the claimed fiber which has a thin film layer, Applicant submits that claim 3 is patentable at least by virtue of its dependency.

*3. Claim 3 In View Of Gipson et al. (USP 4,732,446).*

In rejecting claim 3 in view of Gipson et al. (USP 4,732,446), the grounds of rejection state:

Gipson et. al., '446 teaches (Figs.1-15) a planar light wave circuit 10 that includes an optical device 32,40 provided in a recess 14 which clearly, fully meets Applicant's claimed limitations.

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Because claim 3 depends on claim 1 and Gipson does not disclose at least the claimed fiber which has a thin film layer, Applicant submits that claim 3 is patentable at least by virtue of its dependency.

New Claims

For additional claim coverage merited by the scope of the invention, Applicant is adding new claims 11-18.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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